

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : <b>C12N 15/57, 15/12, 9/64, C07K 14/745, A61K 38/36, 38/48, C12N 5/10, C12Q 1/37</b>		A2	(11) International Publication Number: <b>WO 00/66753</b> (43) International Publication Date: <b>9 November 2000 (09.11.00)</b>
(21) International Application Number: <b>PCT/US00/11416</b>			(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date: <b>28 April 2000 (28.04.00)</b>			
(30) Priority Data: <b>09/302,239</b>	<b>29 April 1999 (29.04.99)</b>	US	
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US	09/302,239 (CON)		
Filed on	<b>29 April 1999 (29.04.99)</b>		
(71) Applicant (for all designated States except US): <b>REGENTS OF THE UNIVERSITY OF MINNESOTA [US/US]; 600 University Gateway, 200 Oak Street S.E., Minneapolis, MN 55455-2020 (US).</b>			<b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
(72) Inventor; and			
(75) Inventor/Applicant (for US only): <b>NELSESTUEN, Gary, L. [US/US]; 1514 Fulham Street, St. Paul, MN 55455 (US).</b>			
(74) Agent: <b>ELLINGER, Mark, S.; Fish &amp; Richardson P.C., P.A., 60 South Sixth Street, Suite 3300, Minneapolis, MN 55402 (US).</b>			

(54) Title: **MODIFIED VITAMIN K-DEPENDENT POLYPEPTIDES**

(57) Abstract

The invention provides vitamin K-dependent polypeptides with enhanced membrane binding affinity. These polypeptides can be used to modulate clot formation in mammals. Methods of modulating clot formation in mammals are also described.